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A STUDY TO DETERMINE
THE EXTENT OF SOCIAL SUPPORT
AND BURNOUT AMONG NURSES AT
WOMACK ARMY COMMUNITY HOSPITAL

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A Graduate Research Project
Submitted to the Faculty of Baylor
University in Partial Fulfillment of the
Requirement for the Degree
of
Master of Health Administration

By

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CHAPTER I
INTRODUCTION

Identification of the Problem.

Pines and Kafry have defined burnout as "a state of physical, emotional, and mental exhaustion which is caused by chronic emotional stresses resulting from intense involvement with people over long periods of time."¹ Burnout is marked by physical depletion and chronic fatigue, by feelings of hopelessness, helplessness, and entrapment, and by the development of negative self-concept and negative attitudes towards work life and other people.

Many of the senior staff members, including the Hospital Commander, Deputy Commander for Administration, and the Chief Nurse at Womack Army Community Hospital, have observed that a significant number of the hospital nurses exhibited symptoms of burnout such as fatigue, malaise, irritability, low morale, moodiness, defensiveness, withdrawal, absenteeism, and decreased job efficiency, to name but a few. This situation has become a matter of concern for the Commander and his staff. Although Womack Army Community Hospital is considered to be a large Medical Department Activity, its monthly workload in Medical Care Composite Units (MCCU) shows that it is easily comparable to three of the Army's eight Medical Centers throughout the country. (Note: as of April 1986, WACH produced approximately 1400 MCCUs.) If the nurses, who represent the largest direct health care provider group within the hospital environment, are

suffering from burnout and are not functioning to the best of their capabilities, serious problems may arise which could ultimately affect Womack's ability to carry out its assigned mission (that of providing quality medical care to the approximately 200,000 people comprising the Fort Bragg active duty community, their dependents, retirees, and their dependents, and other authorized beneficiaries). Coupled with the internal pressures of the hospital work environment which may be causing the signs and symptoms of burnout, Fort Bragg is the home of the 82d Airborne Division and the Special Forces, and both of these units are members of the nation's Rapid Deployment Force. This situation adds to the already stressful work environment and could be an additional contributing factor to the burnout symptoms exhibited by nurses in the hospital.

Review of the literature (House, Cherniss, Pines, Aronson, and Kafry) has also provided evidence that effective social support from four major sources (supervisors, coworkers, spouses, family and friends) can significantly reduce the adverse effects of occupational stressors. The quantity and quality of social relationships with spouses, friends, coworkers, and supervisors appear to have an important bearing on the amount of stress perceived, and the overall mental and well-being of employees.^{2,3,4,5} Therefore, social support provides an attractive strategy for reducing or buffering the deleterious effects of stress in the hospital work environment on burnout among nurses at WACH.

Based on the above mentioned information, it was recommended that a study be conducted to determine the extent of social support and burnout among nurses at Womack Army Community Hospital, and to provide recommendations to management for ameliorating and/or preventing burnout. A limitation placed on this study is that only nurses working in Womack Army Community Hospital would be sampled. Also, nurses who were physically present and had been at WACH for at least 30 days at the time of the survey would be included. The rationale behind this was that nurses who had been assigned to the hospital for that short period of time (<30 days) would not be thoroughly acclimated to the nursing environment and could skew the data. Finally, both the OB/GYN nursing students and the 91C school faculty and students would be excluded from the study. Again, these students and faculty were not involved in patient care or other hospital nursing functions and could affect the validity of the study. The major assumption of this study was that the findings would lead to changes that would benefit the nurses and ultimately patient care at Womack Army Community Hospital. This, of course, was the major reason behind pursuing this study. By presenting sound statistical information with reasonable and realistic recommendations to the management, it was hoped that both the organization and the nurses would be better able to care for themselves, each other, and the patients they serve.

Review of the Literature

Prior to 1974, the concept of burnout was relatively unknown in that it did not appear in the literature. The present interest in this area, for the most part, grew out of the early research of Herbert Freudenberger and Christina Maslach in the late 1970s.^{6,7} Both of these pioneers brought this controversial topic to the forefront which allowed it to be thoroughly scrutinized and criticized by others. The result is that few topics during the last five years have generated so much animated discussion among practitioners (e.g. physicians, psychologists, sociologists, etc). The term "'burnout' seems to have crystallized a set of attitudes and feelings about work that many have rarely discussed publicly until now."⁸

Even with all this attention, however, a complete picture of this phenomenon has not yet been provided. Burnout is still a relatively new concept, and it is clear that burnout warrants more serious study concerning the etiology, symptomatology, and control of burnout than it has previously received.⁹

Burnout, as defined by Maslach, is "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind."¹⁰ Edelwich refers to burnout as a "progressive loss of idealism energy, and purpose, experienced by people in the helping professions as a result of the conditions of their work."¹¹ These, along with numerous other definitions, are in general agreement as concerns certain aspects of burnout.

"First, burnout occurs at an individual level. Second, burnout is an internal psychological experience involving feelings, attitudes, motives, and expectation, and finally burnout is a negative experience for the individual, in that it concerns problems, distress, discomfort, dysfunction and/or negative consequences."¹²

It can be seen by the discussion above that burnout is definitely a detractor for people who choose to work in the human services. The nursing profession is especially vulnerable to burnout. Winbush states that nurses are often so busy helping others that they neglect their own needs. While they react to their patients' stress and act quickly to relieve it, they often do not recognize or treat signs of their own stress.¹³ Reactions to this stress often occur when the nurse attempts to achieve the ideal balance of detached concern. This detached concern is accomplished through physical withdrawal, such as avoiding direct contact with certain patients, quitting the profession, or setting up work desks in out of the way areas of the ward or clinic; through emotional withdrawal such as never talking about work at home or with friends; and finally through mental withdrawals such as developing a set of attitudes which justify detachment from their patients.¹⁴

The ultimate and end result occurs when the nurse becomes so apathetic, cynical, or rigid, that he/she is emotionally/mentally crippled from helping the patients. Signs of this can occur in at least two ways. First, the job stress and strain that occurs in the early stages of burnout contribute to a state of tension,

irritability, and emotional arousal that interferes with helping behavior. Second, the decline in motivation and the loss of positive feeling for patients that occurs later in the process also reduces the nurses' effectiveness.¹⁵

With regards to burnout among nurses, it is important to understand the constructs of the measures against which the results of both this study and a recent study of the nurses at Fitzsimons Army Medical Center are based. Maslach and Jackson followed closely their definition of burnout and designed the Maslach Burnout Inventory to assess the three aspects of the syndrome. The three areas include Emotional Exhaustion, Depersonalization, and Lack of Personal Accomplishment. These dimensions as defined by Maslach and Jackson are listed below:

Emotional Exhaustion: assesses feelings of being emotionally drained and exhausted by a person's work.

Depersonalization: measures an unfeeling and impersonal response towards the patient who is receiving the service, care, treatment, or instruction.

Lack of Personal Accomplishment: assesses the feeling of competence and successful achievement in one's work with people.¹⁶

Both Maslach and Constable feel that emotional exhaustion is the key symptom of burnout. Once this occurs, the depersonalization and subsequent feelings of lack of accomplishment follow.^{17,18}

Social support or the lack of it is another important topic which can effect burnout. Social support systems "serve as buffers for the individual; they help maintain psychological and physiological well being of the individual over time. It has been found that the creative use of social support systems provides an effective preventive mechanism against burnout and tedium."¹⁹ As important as this may seem, very little extensive research has been done on the subject. Gerald Caplan, defined social support systems as "enduring interpersonal ties to groups of people who can be relied upon to provide emotional sustenance, assistance, and resources in times of need, who provide feedback, and who share standards and values."²⁰ Sidney Cobb describes four types of support: First is Social Support which is the most important and consists of emotional support, esteem support, and network support, Second is Instrumental support, or counselling; Third is Active support, or mothering; and Fourth is Material support which is the provision of goods and services.²¹ Kahn and Antonucci define social support as "interpersonal transactions that include one or more of the key elements: affect, affirmation, and aid."²² Affect is defined as liking, admiring, or respecting someone. Affirmation means agreeing or acknowledging that an act or statement of another person is right. Aid refers to direct aid or assistance which includes time, money, information etc., which is given.

As has been the case historically, these researchers and their definitions are different with regards to the specifics of social support, however, they pretty much all agree that a

support system is made up of people who help others through crises, who provide emotional support by utilizing their psychological resources, and who give guidance and tangible resources to further the individual's ability to cope with stressful situations. Both this student's research project and the research conducted by Constable in 1983 utilized the results of the study performed by House and Wells in 1978, on 1809 white male workers in a large manufacturing plant, as the basis for comparison between the samples (workers and nurses). House and Wells study was performed to measure the effects of social support on work stress, health, and the relationship between stress and health among the workforce. The measures of social support involved included four sources: supervisors, coworkers, spouses, and friends or relatives. Findings concerning the direct effect of support revealed that work-related sources of support, especially supervisor support, tended to decrease work stress and indirectly improve health. Nonwork-related sources of support, such as friends and spouse, showed no significant effects for either health or stress.²³ In Constable's study based on 310 nurses at Fitzsimons Army Medical Center, the results were compared to the House and Wells study. With few exceptions, the results were similar to those found in the manufacturing plant study. Supervisor support was negatively correlated with burnout, but a significant relationship between coworker support and burnout was not found. There was also no significant relationship between the other sources of social support and burnout.²⁴ The results of these two studies will be compared to the Womack study.

There are numerous studies in the literature analyzing demographic data (sex, age, experience, education, etc.). Ivancevich & Matteson, Pines & Kafry, Colligan et al, Maslach, and Storlie, provide evidence that individual/group characteristics can and do affect a person's susceptibility to becoming burned-out.^{25,26,27,28,29} Research findings generally reveal that females score higher than males on emotional Exhaustion, but males score higher than females on depersonalization and personal accomplishment.³⁰ Aspects of the job such as the different shift work, hours worked, and supervisory responsibility, also have been found to be correlated with burnout.³¹ The study performed at Fitzsimons Army Medical Center, revealed significant correlations between various demographic information and burnout and social support systems. Specifically, it was found that the nurses at FAMC followed roughly the same pattern that the workers in the Maslach study did. It was also found that nurses working more than 40 hours per week were significantly more emotionally exhausted than nurses who worked a regular 31-40 hour work shift week. These are just a few of the results that were documented in the FAMC study.³² The findings of the FAMC study will be the primary basis for comparison with this study.

Research Methodology

In order to evaluate the statement of the problem as outlined in the first section of this chapter, a survey of nurses was conducted at Womack Army Community Hospital, Fort Bragg, North Carolina. Womack is a federal military medical activity with an operating bed size of approximately 319 and a nursing staff of about 261. The measurement instrument was a self-report questionnaire (See Appendix A). Prior to the actual distribution of the survey, a pre-survey was conducted to ensure that the instrument was easily readable and understandable. Ten individuals (including nurses) were given the survey to complete. A section titled "Comments" with a set of "leading" questions was provided and the results indicated that the survey instrument was relatively simple to understand and complete properly. To each of the surveys, a cover letter was attached. They were individually addressed to each nurse, and included an explanation of both why the survey was being distributed and the intent of this student to keep the survey and the information therein completely confidential. The actual survey document (questionnaire) consisted of three sections:

Part I: General Information. This section asked a series of demographic and job-related questions including "What is your age?", "On what shift do you work?", "How many employees report to you?", etc.

Part II: Maslach's Burnout Inventory (MBI). This measure was developed by Christina A. Maslach and Susan Jackson in 1981 to assess three different dimensions of burnout. This inventory

consists of three subscales: a nine item Emotional Exhaustion subscale (e.g., "I feel emotionally drained from my work.", "I feel frustrated by my job.", etc.); a five item Depersonalization subscale (e.g., "I've become more callous toward people since I took this job.", "I don't really care what happens to some patients.", etc.); and an eight item Personal Accomplishment subscale (e.g., "I feel very energetic.", "I feel exhilarated after working closely with my patients.", "I have accomplished many worthwhile things in this job.", etc.). Each of these twenty-two items is rated on two dimensions, frequency and intensity. The frequency scale ranges from 1 (a few times per year) to 6 (daily). The intensity scale ranges from 1 (very mild) to 7 (very strong). A score of zero is given if the block "never" is circled. The three subscales are scored separately for frequency and intensity.³³

Part III: Social Support Scale. The measure of social support utilized in this study was developed by J. S. House and Wells in 1978. The items within the measure are divided into groups according to the source of social support (i.e., supervisor support, coworker support, spouse, support, and friends and relative support). The first two questions (i.e., "How much can each of these people be relied on when things get tough at work?" and "How much is each of the following people willing to listen to your work related problems?") pertain to all four sources of support. The next question ("How much is each of the following people helpful to you in getting your job done?") pertains to just two job-related sources, supervisor and

coworker. Finally, the last three questions (i.e. "My supervisor is competent in doing his/her job," "My supervisor is very concerned about the welfare of those under him/her" and "My supervisor goes out of his/her way to praise good work.") pertain to only the supervisor support indice. Scores on each item can be answered by circling 0 (not at all), 1 (a little), 2 (somewhat), or 3 (very much).³⁴

The survey questionnaire being completed was now ready for distribution. This student handcarried the surveys to each and every available nurse at Womack which encompassed all three shifts of the duty day for these health care professionals. The background of the study and the confidentiality issue were discussed with each nurse in addition to providing an explanation of the number coding system which was utilized to ensure that the surveys were distributed/returned. A criterion established for this study was that all available nurses would be sampled and a return rate of no less than 75 percent would be accepted. Two weeks were allotted for turn-in of the survey, and to facilitate confidentiality and accessibility, sealed "drop boxes" were placed in strategic locations throughout the hospital. Upon return of the survey, the numbered code was checked off the master roster. This methodology assisted this student in keeping track of the return rate, as well as determining where reminders needed to be sent.

Once the questionnaires were returned, the data from all the surveys were compiled and entered into a data base. To assess the extent of social support and burnout among nurses at Womack

Army Community Hospital, a statistical analysis of this data base, comparing mean scores and standard deviations found in the MBI and House and Wells' Social Support scale, was conducted. Specifically, statistical relationships between the scores on the MBI and Social Support Scale by demographic and job-related variables were examined and analyzed. Also, results of the research were compared to a previous similar study conducted by Constable at Fitzsimons Army Medical Center and studies conducted by Maslach and Jackson, and House and Wells.^{35,36,37}

Based on the results of this survey/study, information was provided to the Commander and other key staff members. Specifically, the following questions were addressed:

- a. Was there evidence of burnout among nurses in the hospital?
- b. If so, which areas appeared to be at greatest risk?
- c. What social support sources (supervisor, coworker, spouse, friends, and relatives) seemed to be related to burnout (based upon a comparison of mean differences $p < .05$)?
- d. What effects did demographic and job-related variables have on burnout and the social support source?
- e. Recommendations for the development of an overall program of prevention of burnout.

FOOTNOTES

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CHAPTER II

RESULTS/DISCUSSION

Introduction

This chapter will discuss the characteristics of Womack Army Community Hospital (WACH), the demographic and job-related variables of the nurse population at WACH, and the representativeness of the sample as compared to the total nurse population. Next, the formation of composite scores pertaining to the Maslach Burnout Inventory (MBI) and House's Social Support measures, and the relationship of demographic/job-related variables with these composite scores, are analyzed. Finally, this chapter ends with a step wise multiple regression analysis of the extent and direction of the relationship between the dimensions of the independent variables (social support), the addition of selected demographic/job-related variables to the equation, and the dependent variable, Burnout. It should be noted at the outset that this study was structured as closely as possible to the study performed at Fitzsimons Army Medical Center by Colonel Joseph F. Constable.¹

Characteristics of the Sample

This study was performed by distributing a survey to the nursing personnel at Womack Army Community Hospital (WACH) located at Fort Bragg, North Carolina. WACH provides a complete range of medical care for active duty, retired personnel, and their dependents located throughout the state of North Carolina.

The patient population is approximately 200,000 people. As of April 1986, the number of operating beds approximated 288, and the average daily census was 228 (72% occupancy rate.)

The total nursing staff (excluding students) was 261. The demographics of the population included 41 (22.5%) males and 141 (77.5%) females, and civilians numbered 63 (34.4%) as compared to 120 (65.6%) military personnel. Nurses studied worked in five major areas of WACH (i.e. Administration, N=24 [13.2%]; Anesthesia and Operating Room, N=14 [7.7%]; Intensive Care Units, N=25 [13.7%]; Outpatient Areas, N=27 [14.8%]; and the Wards, N=92 [50.6%]).

The total nurse population available in the hospital during the survey period was 223 (38 nurses were on regular leave, TDY, convalescent leave, or sick). The number of nurses who completed the questionnaires and turned them in to this student totaled 183. This was an 82% return rate and above the 75 percent criteria established for this study. Analyses were conducted to compare this sample of 183 nurses to the entire nursing population at WACH. This was done in terms of sex, civilian versus military employees, and work areas. The results of these analyses are shown in Tables 1, 2, and 3. The maximum difference between the overall nursing population and the study sample for all three of these demographic/job-related variables was eight percent for the Administration work area. All of the chi-square tests were found not to be significant (i.e. Male vs Female $\chi^2(1)=.0058$; Military vs Civilian $\chi^2(1)=.0058$; and Work Areas $\chi^2(4)=4.2578$) which indicates that the sample was well representative of the total nursing population at WACH.

Table 1.

COMPARISON OF THE PROPORTION OF MALE AND FEMALE
NURSES IN THE TOTAL POPULATION WITH THE SAMPLE

SEX	TOTAL POPULATION (Frequency Expected)	SAMPLE (Frequency Observed)
MALE	44.7 (24.5 Percent)	41 (22.5 Percent)
FEMALE	137.4 (75.5 Percent)	141 (77.5 Percent)

NOTE: $\chi^2(1) = .3908$ N.S.

Table 2.

COMPARISON OF THE PROPORTION OF MILITARY AND CIVILIAN
NURSES IN THE TOTAL POPULATION WITH THE SAMPLE

EMPLOYMENT STATUS	TOTAL POPULATION (Frequency Expected)	SAMPLE (Frequency Observed)
MILITARY	119.24 (65.52 Percent)	120 (65.57 Percent)
CIVILIAN	62.76 (34.48 Percent)	63 (34.43 Percent)

NOTE: $\chi^2(1) = .0058$ N.S.

Table 3.

COMPARISONS OF THE PROPORTION OF NURSES
IN FIVE MAJOR WORK AREAS IN THE TOTAL POPULATION
WITH THE SAMPLE

WORK AREAS	TOTAL POPULATION (FREQUENCY EXPECTED)	SAMPLE (FREQUENCY OBSERVED)
Administration	16.74 (9.2 percent)	24 (13.9 percent)
Anesthesia & Operating Room	13.25 (7.28 percent)	14 (7.69 percent)
Intensive Care Units	28.59 (15.71 percent)	25 (13.74 percent)
Outpatient	31.38 (17.24 percent)	27 (14.84 percent)
Wards	92.05 (50.57 percent)	92 (50.55 percent)

NOTE: $\chi^2(4) = 4.2578$ N.S.

Further review of the study's sample population reveals that the largest number of nurses, 39 (21.3%), fall into the 30-34 age group, with only 21 (11.5%) being less than 25 years of age and 1 (.55%) being over 60 years old. In terms of length of experience in the nursing field, the category >15 years is where most of the nurses fell, 56 (30.6%). In comparison, 23 (12.6%) nurses had less than two years of career experience. For the most part, the nurses in this sample have been at Womack less than 5 years, 145 (79%). However, of the remaining thirty eight nurses, half of them, 19 (10.38%), have been at Womack for over 15 years. There were 77 (42%) nurses working the day shift, with 77 (42%) nurses working rotating shifts in the hospital. The remaining nurses, 29 (15.84%), worked the evening and night shifts. The five levels of nursing education were well represented by the nurses at Womack. Forty (22%) are licensed practical nurses; 45 (24%) are either associate degree or diploma degree nurses; 75 (41%) have baccalaureate degrees and 23 (13%) have advanced degrees, mostly in the nursing field. 128 (70%) of the nurses were married, 33 (18%) were single, and 22 (12%) were either widowed or divorced. Of the 70% that were married, 106 (58%) had children and 42 (42%) did not. Of those nurses who reported that they have children, 33 (18%) stated that they have preschool children (5 years old or less). Finally, a comparison was made between the different work areas and the positions (supervisors/nonsupervisors) that the nurses in the sample were working in. It is immediately evident that the majority of the sample included nurses who were staff members on the ward, 69

(40%). The rest of the nurses are fairly well spread out among the designated work areas (Administration, Outpatient, Operating Room, and Intensive Care Units), and they occupy the various duty positions such as Head Nurse, Section Supervisor, Wardmaster, or Administrator. A more detailed summary of this demographic/job-related data can be found in Tables 4 through 12.

In comparing this data with the Fitzsimons study, the differences in age appears to be that Womack has a higher percentage of younger nurses (under 25) in addition to more older nurses (50-60+), whereas FAMC has more middle age nurses (30-49). In terms of experience, again Womack has a higher percentage of nurses with fewer years of experience (<2), but Fitzsimons has more nurses with 11 to 15+ years of experience. In regards to length of employment at the two hospitals, the figures indicate that both samples had the majority of nurses being employed less than five years. However, again Womack had a higher percentage of nurses who have been at the hospital for more than eleven years. A comparison of work shifts and nursing education levels did not reveal any significant differences in percentages, however, in reviewing marital status, there seems to be a higher percentage of married nurses at Womack as compared to Fitzsimons. In contrast, there was a higher percentage of single and widowed nurses in the Fitzsimons sample. Another note of interest is that even though the Womack sample has more married nurses, the percentage of those nurses having pre-school age children was less than the nurses at Fitzsimons. One would postulate that with a younger nursing sample which had more married nurses,

TABLE 4.
AGE DISTRIBUTION FOR THE SAMPLE

AGE (IN YEARS)	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
Less than 25	21	11.48	11.48
25 to 29	39	21.31	32.79
30 to 34	36	19.67	52.46
35 to 39	28	15.30	67.76
40 to 44	16	8.74	76.50
45 to 49	15	8.20	84.70
50 to 59	27	14.75	99.45
60 years or older	1	.55	100.00
	183	100.00	

TABLE 5.
YEARS OF NURSING
EXPERIENCE

TIME IN NURSING (YEARS)	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
Less than 2	23	12.57	12.57
2 to 5	30	16.39	28.96
6 to 10	48	26.23	55.19
11 to 15	25	13.66	68.85
Over 15	56	30.60	99.45
No Response	1	.55	100.00
	183	100.00	

Table 6.

LENGTH OF EMPLOYMENT AT
WOMACK ARMY COMMUNITY HOSPITAL

TIME (YEARS)	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
Less than 2	78	42.63	42.63
2 to 5	67	36.61	79.24
6 to 10	14	7.65	86.89
11 to 15	5	2.73	89.62
Over 15	19	10.38	100.00
	183	100.00	

Table 7.

WORK SHIFTS

SHIFT	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
Day	77	42.08	42.08
Evening	20	10.92	53.00
Night	8	4.37	57.37
Rotating	77	42.08	99.45
No Response	1	.55	100.00
	183	100.00	

Table 8.

NURSING EDUCATION
LEVELS

EDUCATIONAL LEVEL	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
LPN	40	21.86	21.86
Associate Degree	14	7.65	29.51
Diploma	31	16.94	46.45
Baccalaureate	75	40.98	87.43
Graduate Degree	23	12.57	100.00
	183	100.00	

Table 9.

MARITAL STATUS

STATUS	NUMBER	PERCENTAGE	ADJUSTED CUMULATIVE PERCENTAGE
Married	128	69.95	69.95
Single	33	18.03	87.98
Widowed	5	2.73	90.71
Divorced/Separated	17	9.29	100.00
	183	100.00	

Table 10.

NURSES WHO DO/DO NOT
HAVE CHILDREN

	NUMBER	PERCENTAGE
Nurses w/Children	106	57.92
Nurses w/No Children	77	42.08
	183	100.00

Table 11.

NURSES WHO DO/DO NOT HAVE
PRESCHOOL CHILDREN

	NUMBER	PERCENTAGE
Nurses with Pre-School Children	33	18.03
Nurses with No Pre-School Children	105	57.38
Not Applicable	40	21.86
No Response	5	2.73
	183	100.00

Table 12.

COMPARISON OF POSITION DESIGNATION TO AREAS

	NURSING ADMINISTRATION	ALL WARDS (MED, SURG, PSYCH, ORTHO, PEDS, OB/GYN NEWBORN NURS, L&D	EMERGENCY ROOM/ ALL OUTPATIENT CL
HEAD NURSE	2	10	4
SECTION CHIEF/ SUPERVISOR	7	2	2
STAFF MEMBER	11	69	19
WARD MASTER	1	6	0
ADMINISTRATOR	3	0	0
TOTALS	24	87	25

*9 individuals failed to complete these questions.

Table 12.

COMPARISON OF POSITION DESIGNATION TO AREAS AT WORK

ALL WARDS (MED, SURG, PSYCH, ORTHO, PEDS, OB/GYN NEWBORN NURS, L&D	EMERGENCY ROOM/ ALL OUTPATIENT CLINICS	ANESTHESIA OPERATING ROOM	SICU/MICU	TOTALS
10	4	2	4	22
2	2	2	0	13
69	19	10	13	122
6	0	0	7	14
0	0	0	0	3
87	25	14	24	174*

to complete these questions.

there would be a greater percentage of younger children in the Womack nursing sample.²

Maslach's Burnout Inventory

The results of this study were compared with the degree of Burnout based on Maslach's Burnout Inventory (MBI) scoring key. The findings indicate that the burnout experienced by nurses at Womack Army Community Hospital was "low to moderate." Table 13 presents the range of these scores for each of the subscales (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) by frequency and intensity as determined by Maslach and Jackson through research.³ Table 14 compares the raw scores, means and standard deviations in this study, with those reported by both Maslach and Jackson and Colonel Constable. The results indicate that both the "various professions" studied by Maslach and Jackson, and the nurses at Fitzsimons Army Medical center were more "burned out" than the nurses at Womack Army Community Hospital. An analysis performed by calculating t-statistics comparing the different means of the three studies showed that there were significant differences ($P < .001$) between the Womack mean scores and the Maslach and Jackson mean scores on both frequency and intensity on all three subscales; and between the frequency results of all three subscales for the Fitzsimons nursing sample. However, it was found that for the intensity measure, only Depersonalization and Emotional Exhaustion were statistically significant ($P < .001$) between Fitzsimons and Womack.

Table 13.

CLASSIFICATION OF MBI BURNOUT SCORES

MBI SUBSCALES	RANGE OF BURNOUT SCORES		
	LOW (Lower Third)	MODERATE (Middle Third)	HIGH (Upper Third)
<u>Emotional Exhaustion</u>			
Frequency	<17	18-29	>30
Intensity	<25	26-39	>40
<u>Depersonalization</u>			
Frequency	<5	6-11	>12
Intensity	<6	7-14	>15
<u>Personal Accomplishment</u>			
Frequency	>40	39-34	<33
Intensity	>44	43-37	<36

NOTE: The range of burnout scores is based on research involving various occupational groups of the helping professions (i.e. Social Security Administration public contact officers, N=845; police officers, N=142; nurses, N=231; administrators, N=125; teachers, N=222; counselors, N=97; social workers, N=91; probation officers, N=68; mental health workers, N=63; physicians, N=86; psychologists and psychiatrists, N=40; attorneys, N=31; and others, N=77).

Table 14.
COMPARISON OF MEANS AND STANDARD DEVIATIONS
FOR THE MASLACH BURNOUT INVENTORY

		EMOTIONAL EXHAUSTION			DEPERSONALIZATION		
		FAMC	WOMACK	MASLACH	FAMC	WOMACK	MASLACH
Frequency	X	22.22	20.458	24.08	6.80	5.73	9.4
				5.31 ^a 13.49 ^b			4.5 17.9
SD		12.72	12.083	11.88	6.41	5.98	6.9
29 Intensity	X	28.85	25.226	31.68	8.99	7.708	11.78
				10.08 ^a 22.27 ^b			4.82 18.03
SD		14.99	14.09	13.84	8.00	7.995	8.09

^aThis is the value of the t-statistic for comparison of the means between FAMC and the study at Womack. ($P < .001$)

^bThis is the value of the t-statistic for comparison of the means between Womack. ($P < .001$)

^cThis t-statistic is not significant for means between FAMC and Womack.

Table 14.

COMPARISON OF MEANS AND STANDARD DEVIATIONS
FOR THE MASLACH BURNOUT INVENTORY (MBI)

DEPERSONALIZATION				PERSONAL ACCOMPLISHMENT			
FAMC WOMACK		MASLACH		FAMC WOMACK		MASLACH	
5.31 ^a	6.80	5.73	9.4	4.54 ^a	37.43	38.363	36.01
13.49 ^b				17.98 ^b			3.42 ^a
	6.41	5.98	6.9		7.23	10.535	11.26 ^b
						6.93	
10.08 ^a	8.99	7.708	11.78	4.82 ^a	41.01	40.994	39.7
22.27 ^b				18.03 ^b			.058 ^c
							5.96 ^b
	8.00	7.995	8.09		8.48	8.84	7.68

t-statistic for comparison of the means between the study at
ack. ($P < .001$)

t-statistic for comparison of the means between the study of Maslach and the study at
significant for means between FAMC and Womack.

The Personal Accomplishment subscale was found not to be statistically different between the two studies (WACH and FAMC). As Constable stated in his doctoral dissertation "comparison of these mean scores may be misleading since it appears that the classification of the burnout scores by Maslach and Jackson involved specific high risk work groups (see bottom of Table 13). The demands of the work environment were more varied for the population in this study, and therefore, such comparisons may tend to misrepresent the burnout being experienced by the nurses at FAMC."⁴ However, in this case where two relatively similar nursing samples from similar military hospital working environments are compared, it makes the comparisons and the results seem to be more valid. The information gained by performing these analyses indicates, at least from the "burnout" levels, that the nurses at Womack perceive that they are experiencing less burnout than might have been expected.

House's Social Support Scale

Four dimensions of social support in the work environment were evaluated (Supervisor Support, Coworker Support, Spouse Support, and Friend and Relative Support). The average social support scores report by House (1982), which studied mostly white males working in factories, and the scores reported by Constable of nurses at Fitzsimons Army Medical Center, are compared to the results of this study and presented in Table 15. The findings here revealed that just as other nurses at Womack perceived that they are less burned out than the other two studies (Table 14),

Table 15.

COMPARISON OF MEANS AND STANDARD
DEVIATIONS FOR THE SOCIAL SUPPORT SUBSCALE

DIMENSIONS	MEANS AND STANDARD DEVIATIONS			t-STATISTICS
	FAMC	WOMACK	HOUSE	
Supervisor (18) ^a				3.162 ^b
X	12.92	13.6	10.14	20.43 ^c
SD	5.3	4.89	4.52	
Coworker (9)				.557 ^d
X	6.6	6.674	5.01	14.74 ^b
SD	2.05	1.897	2.08	
Friends & Relatives (6)				2.88 ^b
X	3.88	4.251	2.71	14.06 ^c
SD	1.9	1.766	1.93	
SPOUSE (7)				14.47 ^b
X	3.41	5.937	4.47	10.08 ^c
SD	3.21	1.543	2.56	

^aValues in parentheses denote maximum score for each source of support.

^bThis is the value of the t-statistic for comparison of the means between the study at FAMC and the study at Womack. (For Supervisor and Friends/Relatives, $P < .02$, for Spouse $P < .001$)

^cThis is the value of the t-statistic for comparison of the means between the study House and the study at Womack ($P < .001$)

^dFor the dimension of Coworker, there is no significance in the means between the FAMC study and Womack study.

they also perceive that they receive more social support from the different support sources. Consistently, the means are higher than either those reported by House or Constable.^{5,6} Again, when performing t-statistics between the three studies, there was statistically significant differences ($P < .001$) found between all four social support scales when comparing House's results with those of this study. However, when analyzing the differences among means between Constable's nursing sample at FAMC and the nurses at Womack, the results were not quite as strong. For Supervisor Support and Friends/Relative Support, there was a statistical difference ($P < .01$). For Spouse Support there was a stronger significant difference ($P < .001$). Finally, the comparison of the means between the Coworker scales revealed that there was no statistically significant difference between the two studies. It should be noted that both sets of these Coworker means were significantly higher ($P < .001$) than those shown by House.

Again, Constable in his dissertation related that "the mean scores for the factory workers were all lower than those found in this study except for spouse support. The comparison of these two work groups involves vastly different populations and work environments. Research in this area is lacking and more suitable comparison groups were not found. For these reasons, discussion of mean differences in social support is not considered meaningful."⁷ This student feels that this study has helped to make the comparisons more suitable by providing data of two very similar study samples. When comparing the different samples as

outlined above, and noting that the means and standard deviations were fairly similar in appearance but for the most part significantly different, there is more validity and strength in the analysis when comparing the four dimensions of social support. Thus, as was stated earlier, the nurses at Womack perceive that they are receiving more social support (feedback, listening, helping, competence, concern, praise, reliability, etc.) from those they work with, live with, and associate with, than was shown by either of the other two studies presented.

Effects of Demographic and Job-Related Variables

This section includes a discussion about the relationships found between scores on the Maslach Burnout Inventory, House's Social Support scales, and selected demographic/job-related variables. The variables that were used included sex, age, time employed at Womack, nursing education, hours per day of direct patient care, work hours per week, areas of work, and supervisory responsibility. Only significant relationships ($P < .05$) are summarized in tables included in this section. As compared to the mean scores reported in Maslach's Burnout Inventory and House's social support scales, the means analyzed here are based on standardized scores (means are equal to zero and variances are equal to one). To obtain a more complete picture of the relationships found/not found between these scales and the demographic/job-related variables, please refer to Tables 26 through 33 presented in Appendix B.

Sex, Nursing Education, Time employed at Womack, Hours per Day of
Direct Patient Care, Work Hours Per Week, and Supervisor
Responsibility

Comparison of all these variables to the burnout and social support scales revealed no significant differences between their standardized mean scores. This was extremely noteworthy because Colonel Constable, in his study, found significant differences in almost each and every one of these variables. There were, however, several variables which came close to having a significant relationship such as the demographic variable, Sex. The t-test revealed the results $P=.073$ for the social support index, Friends/Relative. For the job-related variable, Hours Worked, Emotional Exhaustion subscale showed $P=.057$, and finally for the number of Hours Worked Per Day in Direct Patient care variable, both the Emotional Exhaustion subscale $P=.091$ and the Depersonalization subscale $P=.077$ appeared to be very close to being significant. None of the other variables reported even approximated significance. In terms of what all of the facts presented thus far means, the nursing sample at Womack is a very homogenous group with regards to these variables and their relationship to Burnout and Social Support. There are no significant differences between males and females, between the number of hours they work per week, between how many hours of patient care they render, between how long they have been employed at work, between how many people they supervise or between what their different education levels are. After comparison of this study with the results of the FAMC study and

noting the many significant differences reported at FAMC, this student was a little perplexed. However, these results may reveal the true difference between working at an Army Medical Center and a smaller Medical Activity. The Medical Center is a large, spread out, diverse organization whereas the community hospital is smaller, more confined, and perhaps easier to adapt to. Therefore, the size of an organization may tend to effect the behavior and perception of those who work within it. This would be an interesting topic for further research.

Age

Even after all of the discussion above, there were some significant differences shown between age and several subscales of the Maslach Burnout Inventory. The sample was divided into three different age groups: Group 1 - [29 years and under (N=60)], Group 2 - [30 years to 44 years (N=80)], and Group 3 - [75 years and older (N=43)]. As shown in Table 16, there were significant differences found between group mean scores for Emotional Exhaustion, $F(2/172)=5.86$ $P<.003$, and for Depersonalization $F(2/174)=5.212$ $P<.006$. Post hoc comparisons utilizing the Sheffe' technique found that Group 1 and Group 3 were significantly different ($P<.001$) for both Emotional Exhaustion and Depersonalization, and Group 2 and group 3 were significantly different for both Emotional Exhaustion ($P<.01$) and Depersonalization ($P<.05$). As one might expect, younger nurses perceive that they are more emotionally drained and act

Table 16.

DIFFERENCES AMONG NURSES DUE TO AGE

NURSE GROUPS

	GROUP I	GROUP II	GROUP III
	29 & Under (N=60)	30-44 (N=80)	45 & Over (N=43)
<u>Variable</u>			
Emotional Exhaustion			
X	.261	.012	-.424
SD	1.041	.908	.939
Depersonalization			
X	.269	-.008	-.372
SD	1.058	.934	.932

NOTE: Post hoc comparison (Sheffe' procedures) found that the standardized means between Group 1 and Group 3 and Group 2 and Group 3 are significantly different for Emotional Exhaustion, and the means between Group 1 and Group 3 and Group 2 and Group 3 are significantly different for Depersonalization.

more impersonally toward their patients than do the older nurses. A comparison between WACH and FAMC nurses showed similar findings in regards to the fact that younger nurses perceive themselves not treating their patients as humanely and caringly as possible. The findings on both of these studies and those of Maslach and her colleagues indicate that the age factor is generally involved with burnout. Perhaps the target group for prevention programs, education, and a truly concerted effort should be aimed at the younger, less experienced nurse, perhaps beginning during nursing school. Pfifferling states "Students' and educators internalize a set of myths and expectations that fuel the burnout process. American society and academicians idealize the health care professional as a culture hero. The health care professional is expected to be the best and the brightest and must perform his or her professional role at all times. The media uncritically reinforces this "super nurse" mentality."⁸

Another important aspect that can be noted here is that no significant differences were found between the three age groups and the four sources of social support. The same type of results were also reported by Constable. This definitely offers some food for thought and will be reinforced later in the final chapter.

Work Areas

The areas of work were divided into five distinct groups:
Group 1 - [Administrative (N=25)], Group 2 - [Wards (N=92)],
Group 3 - [Outpatient Areas (N=26)], Group 4 - [Anesthesia and

Operating Room (N=14)] and Group 5 - [Intensive Care Units (N=25)]. As shown in Table 32, there was a significant mean difference between the areas of work pertaining to the Supervisor Support subscale, $F(4/168)=2.659$ $P<.035$. To find out where these differences were, the Sheffe' post hoc procedure was used. Since there were more than just a couple of groups, it was found that the results would be more meaningful if the raw means (rather than standardized means) were utilized when performing this statistical procedure. Therefore, Table 17 summarizes the comparison of the means between all five groups. The results reveal that there were significant differences between the Administrative areas and the Outpatient areas ($P<.01$), between the Administrative areas and the Anesthesia/Operating Room areas ($P<.05$), between the Wards and Outpatient areas ($P<.01$), between the Wards and the Anesthesia/Operating Room area ($P<.01$), between the Outpatient areas and the Anesthesia/Operating Room areas ($P<.01$) and finally between the Anesthesia/Operating Room area and the Intensive Care Units ($P<.01$). While there was no difference detected in terms of the work (including the outpatient) areas and any subscale of Maslach's Burnout Inventory, the outpatient areas did not follow suit in how they felt about the support they received from their supervisor. Nurses in the Outpatient areas reported significantly less Supervisor Social Support than the Administrative areas, Wards, and the Operating Room/Anesthesia. The Operating Room also reported a significantly higher perception of Supervisor Support than the Administrative areas, Wards, and the Intensive Care

Table 17.

DIFFERENCES IN WORK AREAS

NURSE GROUPS

<u>Variable</u>	Group I	Group II	Group III	Group IV	Group V
	Admin (N=25)	Wards (N=92)	Outpatient (N=26)	Anes & OR (N=14)	ICU (N=25)
Supervisor Support					
X	.165	.020	-.378	.615	-.207
SD	.719	.998	1.224	.519	1.045

NOTE: Tukey's HSD (Honestly Significant Difference) Test resulted in concluding that when comparing the standardized means there are significant differences ($\underline{p} < .05$) somewhere between these five work areas.

Units. The data was reassessed by reorganizing the groups in the following manner. Since the Anesthesia/Operating Room group had the highest mean of all the groups, it was separated into a separate group called Group 1 - [Anesthesia/OR (N=14)]. The middle two means were found in the Administrative areas group and the Wards group, and these two were combined into one and called Group 2 - [Admin/Wards (N=117)]. The lowest means were found in the Outpatient areas group and Intensive Care Units group and these were combined to form Group 3 - [Outpatient/ICU (N=51)]. Table 18 lays out the new means and standard deviations, and following the post hoc comparison (Sheffe' procedures), it was determined that there is a statistically significant difference between all three groups ($P < .01$). This provides further information as to where the emphasis for Supervisor Support should be reinforced. The study reveals that nurses working in the Outpatient Areas and the Intensive Care Units felt that they received less Supervisor Support than any of the other combined groups. On the other hand, the Anesthesia/Operating Room nurses perceived that they received a higher amount of support from supervisors than did the other groups. Comparing this with Constable's study, significant differences were found between the different work areas for Supervisor Support, but entirely opposite from the nurses at Womack, the nurses working in the Outpatient areas and the Intensive Care Units reported the highest amount of Supervisor Support when compared to the other work areas. Constable's study also showed significant differences between the work areas for Emotional Exhaustion and

Table 18.

DIFFERENCES IN COMBINED WORK AREAS

NURSE GROUPS

<u>Variable</u>	GROUP I	GROUP II	GROUP III
	Anesthesia/OR (N=14)	Admin & Wards (N=117)	Outpatient & ICU (N=51)
Supervisor Support			
X	16.615	13.864	12.18
SD	2.53	4.606	5.521

NOTE: Post hoc comparison (Sheffe' procedures) found that the means between all three groups are significantly different. (\underline{p} <.01).

for Coworker support. Again, the outpatient nurses reported that they were less emotionally exhausted and received higher coworker support than did the other areas.⁹ The results of this study are also different from what has been shown in past research.

Whereas nurses working in Intensive Care Units tend to make nurses more susceptible to burnout and lower feelings of social support, the Outpatient nurses generally work in a more predictable environment with stable hours, no weekends, less intense patient care responsibilities and show less of a chance of becoming burned-out or perceiving themselves as having lower levels of social support.^{10,11,12} This was not the case with the nursing sample at Womack. Management has two areas of particular interest (Outpatient and Intensive Care Units) that should be investigated. Determination should be made as to what may be causing these perceptions and how they could possibly prevent this from happening in the future. Some recommendations for improving social support mechanisms will be included in the final chapter of this paper.

Social Support, Demographic/Job-related Variables and Burnout

The final analysis of this chapter will deal with the regression of the three different dimensions of Burnout (Emotional Exhaustion, Depersonalization, and Lack of Personal Accomplishment) upon the independent variables of Social Support, and selected demographic/job-related variables. The first part of this section will involve the findings of a correlation matrix which will be used to review and evaluate the bivariate

relationships between the Maslach Burnout Inventory dimensions and the Social Support subscales. After this a discussion pertaining to the presentation of the results of each MBI dimension regressed separately on the four Social Support dimensions will be presented. Finally the results which occurred when five demographic/job-related variables were added to the regression model will be discussed.

Intercorrelation Matrix of the Measures

Table 19 presents the intercorrelations between the dependent and independent measures used in this study. Review of the matrix shows that the Supervisor Support dimension of the Social Support scale was negatively correlated with Emotional Exhaustion ($P < .001$). This provides evidence that the greater the perception that these nurses are being helped by their supervisors in their work areas, the less emotional exhaustion they will report. Other dimensions of the independent variables produced statistically significant ($P < .05$) results but were minimally correlated with the burnout dimensions. Neither Friends/Relative Support, nor Spouse, proved to be significantly correlated with any of the dimensions of the MBI, and therefore, appear to be weak predictors of burnout. One other note which should be pointed out is that two of the independent variables,

Table 19.

INTERCORRELATION MATRIX FOR ALL MEASUREMENTS

DIMENSIONS	EMOTIONAL EXHAUSTION	DEPERSONALIZATION	PERSONAL ACCOMPLISHMENT	SU SU
Emotional Exhaustion	1.000			
Depersonalization	.639***	1.000		
Prsnl Accomplishment	-.156**	-.173	1.000	
Supervisor Support	-.318***	-.287**	.041	1
CoWorker Support	-.303**	-.222*	.237*	
Friends & Relative Support	-.144	-.100	.012	
Spouse Support	.026	.069	-.048	-

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 19.

INTERCORRELATION MATRIX FOR ALL MEASURES

DEPERSONALIZATION	PERSONAL ACCOMPLISHMENT	SUPV SUPPORT	COWORKER SUPPORT	FRIEND AND RELATIVE SUPPORT	SPOUSE SUPPORT
1.000					
-.173	1.000				
-.287**	.041	1.000			
-.222*	.237*	.237*	1.000		
-.100	.012	.140	.156*	1.000	
.069	-.048	-.104	.053	.408**	1.000

Supervisor Support and Coworker Support, also appear to be at least moderately intercorrelated. The results shown in Colonel Constable's study pretty much parallel the results detailed above. Supervisor Support was, in fact, correlated with Emotional Exhaustion and Depersonalization in a negative manner, and Coworker was correlated less strongly with all three of the Burnout dimensions.¹³

Regression Results/Discussion for Emotional Exhaustion

The multiple R was .48 when Emotional Exhaustion of the Maslach Burnout Inventory was regressed on the four Social Support subscales (Supervisor Support, Coworker Support, Friends/Relative Support, and Spouse Support). These four variables, therefore, accounted for 23 percent of the variance in the Emotional Exhaustion component of the burnout syndrome among the nurses at WACH. However, only Supervisor Support, Coworker Support, and Friend/Relative Support were statistically significant predictors, with standardized beta values of $-.249$ ($P < .006$), $-.262$ ($P < .004$) and $-.184$ ($P < .05$) respectively. Next, five select job-related/demographic variables (age, sex, hours worked, patient care hours worked, and Supervisory Responsibility) were entered into the model, and the multiple R increased to .54. Here, only Supervisor Support, Coworker Support, and Age were significant predictors with beta weights of $-.223$ ($P < .009$) respectively. The variance accounted for in Emotional Exhaustion increased to 29 percent with these five demographic/job-related variables entered into the model. A summary of these results can be seen in Table 20.

MULTIPLE REGRESSION RESULTS FOR EMOTIONAL EXHAUSTION

* $\bar{P} < .006$
 ** $\bar{P} < .004$
 *** $\bar{P} < .005$

*P<.016
**P<.005
***P<.009

Based on these results, the Emotional Exhaustion dependent variable was regressed on a reduced model which included only those independent social support variables, and the Demographic/job-related variables that were found to be statistically significant ($P < .05$) in the regression model. When Emotional Exhaustion was regressed on the three most powerful predictors (Supervisor Support, Coworker Support, and Age), the multiple R was .45 and the variance accounted for (R^2) was 21 percent. See Table 21 for summary of these findings. The beta values were -.242 ($P < .001$), ~~-.233~~ ($P < .001$), and ~~-.225~~ ($P < .001$) which shows that as Supervisor support and Coworker Support increase, the effects of emotional exhaustion decrease and that there is a negative relationship with age (younger nurses appear to be more emotionally exhausted). This further provides support to the findings that were reported earlier in this paper. No real comparisons can be made between this study and anyone else's, including Colonel Constable's study at Fitzsimons Army Medical Center, because only selected demographic/job-related variables were used, and the Work Environment Subscales were not included; thus, the two studies varied considerably in this area. However, once again, the statistical applications applied during the analysis have held up well under close scrutiny and this student feels confident that the conclusions and results reported can be defended quite adequately. Further discussion pertaining to how these findings can be translated into methods/means for preventing/ameliorating burnout will occur in Chapter 3.

Table 21.

REGRESSION RESULTS FOR THE
THREE STRONGEST PREDICTORS OF EMOTIONAL EXHAUSTION

Independent Variables As Entered	BETA	t-VALUE
Supervisor Support	-.242	-3.38*
Coworker Support	-.233	-2.27*
Age	-.225	-3.25*

NOTE: * \underline{P} <.001

R^2 = .21

Regression Results/Discussion for Depersonalization

The Social Support variables of Supervisor Support, Coworker Support, Friends/Relatives Support, and Spouse Support resulted in a Multiple R of .35 indicating that .12 percent of the variance in the Depersonalization dimension of Maslach's Burnout Inventory can be accounted for by the four Social Support subscales. However, only Supervisor Support and Coworker support were found to be statistically significant with standardized beta values of $-.163$ ($P < .032$) and $-.198$ ($P < .039$) respectively. Once again, the five selected job-related/demographic variables were entered into the regression model, and the Multiple R increased to .471. This time however, only Coworker Support, Age, and Patient Care Hours were found to be significant predictors of Depersonalization with beta values of $-.214$ ($P < .025$), $-.218$ ($P < .017$) and $.215$ ($P < .017$) respectively. The variance accounted for Depersonalization increased to 22 percent with these five demographic/job-related variables entered into the regression model. A summary of this data can be found in Table 22.

With the results found here, the Depersonalization dependent variable was regressed on a reduced model which included only those independent social support variables, and the demographic/job-related variables that were found to be statistically significant ($P < .05$) in the regression model. When Depersonalization was regressed, the three most powerful predictors (Coworker Support, Age, and Patient Care Hours) the multiple R decreased to .356 with the variance accounted for (R^2) equaling 13 percent. See Table 23 for a summary of these

Table 22.

MULTIPLE REGRESSION RESULTS
FOR DEPERSONALIZATION

Independent Variables As Entered	BEFORE DEMOGRAPHICS		WITH DEMOGRAPHICS	
	BETA	t-VALUE	BETA	t-VALUE
<u>Social Support</u>				
Supervisor	-.163	-1.70*	-.098	-1.02
CoWorker	-.198	-2.09**	-.214	-2.27*
Friend/Relative	-.145	-1.47	-.117	-1.18
Spouse	.107	1.09	.113	1.14
<u>Demographics</u>				
Age			-.218	-.243**
Sex			.126	1.36
Hours Worked			.026	.29
PC Hour			.215	2.42***
Supv Resp			.105	1.17

 $R^2 = .12$
 $R^2 = .22$

* $\underline{P} < .032$
** $\underline{P} < .039$

* $\underline{P} < .025$
** $\underline{P} < .017$
*** $\underline{P} < .017$

Table 23.

REGRESSION RESULTS FOR THE
THREE STRONGEST PREDICTORS OF DEPERSONALIZATION

Independent Variables As Entered	BETA	t-VALUE
CoWorker Support	-.224	-3.08*
Age	-.212	-2.92**
Patient Care Hours	.183	2.52***

NOTE: * $\bar{p} < .002$
 ** $\bar{p} < .004$
 *** $\bar{p} < .013$

$R^2 = .13$

findings. The beta values were $-.224$ ($P < .002$) for Coworker Support, -0.212 ($P < .004$) for Age, and $.183$ ($P < .013$) for Patient Care Hours which demonstrates that depersonalization is increased when coworker support and age are decreased. On the other hand, when the number of hours of direct patient care increases, so does depersonalization. Once again, as with the results shown earlier in this study, further evidence is provided that the younger nurses feel more depersonalized than the older nurses at WACH. This study indicates that Coworker Support is a significant predictor of depersonalization and would be an excellent area for the Nursing Department to focus on when dealing with the amelioration of burnout. Finally, there were no significant differences found between the different nursing groups (See Table 31) and the number of hours of direct patient care the nurses provide. These variables involving depersonalization (coworker support, age, and patient care hours) are definitely target areas for the Department of Nursing to reevaluate and possibly consider in a hospital-wide program for preventing Burnout. Further discussion will follow in Chapter 3.

Regression Results/Discussion of Personal Accomplishment

The final multiple regression analysis dealt with the Personal Accomplishment dimension of Maslach's Burnout Inventory. The Multiple R was $.21$ which indicated that 5 percent of the variance in Personal Accomplishment could be accounted for by the four subscales of House's Social Support Index. Only Coworker Support was found to be statistically significant with a beta value of $.204$ ($P < .047$). The five job-related/demographic

variables were entered into the regression model, and this time the multiple R increased to .34. Once again, Coworker Support and Patient Care Hours were found to be the significant predictors of Personal Accomplishment with beta values of .186 ($P < .042$) and .215 ($P < .029$) respectively. The variance accounted for Personal Accomplishment increased to 12 percent when these demographic/job-related variables were added to the regression model. A summary of this data can be seen in Table 24.

The two strongest predictors of Personal Accomplishment (Coworker Support and PC Hours) were regressed on a reduced model and this time the multiple decreased to .28 with the variance accounted by these variables equalling .8 percent. See Table 25 for a summary of these findings. The beta values were .227 ($P < .003$) for Coworker Support and .156 ($P < .039$) for Patient Care Hours respectively. The conclusion that can be derived here is that as both coworker support and the number of patient care hours worked increases, so do their feelings of personal accomplishment. As was discussed in the depersonalization section, both Coworker Support and Patient Care Hours Worked are significant areas to explore when dealing with burnout at Womack. No individual nursing groups can be singled out as being more susceptible than others to feelings of lack of accomplishment in their work environment. Since this is the case, it would be a great opportunity to structure an organizational program for burnout emphasizing these two areas throughout the hospital. More food for thought for the final chapter.

MULTIPLE REGRESSION RESULTS FOR PERSONAL ACCOMPLISHMENT

* $\underline{P} < .042$
** $\underline{P} < .029$

Table 25.

REGRESSION RESULTS FOR
THREE STRONGEST PREDICTORS OF PERSONAL ACCOMPLISHMENT

Independent Variables As Entered	BETA	t-VALUE
CoWorker Support	.227	3.03*
Patient Care Hours	.156	2.08**

NOTE: * \underline{P} <.003
 ** \underline{P} <.039

Unlike the study of nurses at FAMC which had statistically significant differences among various nurse groups for sex, age, hours per week worked, children, oncology patients, nursing experience, length of employment, nursing education, work areas, supervisory responsibility and hours per day of direct patient care, the study at Womack only revealed two areas of significant difference, those being age and work areas. The age variable was predictable and agreed with both Constable's study and Maslach's study. The findings indicate that the younger nurses are more susceptible to burnout than older nurses. However, nurses at Womack deviated from the expected in work areas when it was shown that the outpatient area nurses felt less social support from their supervisors than did nurses in other areas throughout the hospital. Once again, both Constable and Maslach and Pines found the opposite to be true. They found that outpatient nurses are less prone to burnout and usually perceive higher social support. The Outpatient Nursing areas and the Intensive Care Units are definitely areas worthy of further investigation when a program of burnout prevention is discussed.

Finally, in line with what has been discussed above, the regression models analyzed in this chapter could be instrumental in giving the nursing leadership some recommended direction for their attack on burnout and increased social support. The areas identified as potential predictors were Supervisor Support, Coworker Support, age, and Patient Care Areas. This doesn't mean that the other variables could not be explored, however, statistically speaking, these were found to have the strongest

correlations with the burnout dimensions. This study cannot in actuality be compared to others, at this point, because the regression analyses were performed on fewer variables than Constable's study at FAMC. The format of this study could easily be reproducible at other military/civilian hospitals and the results would make the discussion even more credible.

In the final chapter, conclusions and recommendations will be made based upon findings presented above.

FOOTNOTES

¹Joseph F. Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, PhD Dissertation for the Graduate College of the University of Iowa, 1983.

²Constable, The Effects of Social Support and the work Environment Upon Burnout Among Nurses, pp 58-65

³C. Maslach and S. Jackson, Maslach Burnout Inventory Manual, Palo Alto, California: Consulting Psychologists Press, 1981.

⁴Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, p 129.

⁵Ibid, p 85.

⁶J. S. House, Work Stress and Social Support, Reading, Massachusetts: Addison-Wesley, 1981, pp 70-78.

⁷Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, p 133.

⁸John-Henry Pfifferling, "Viewpoint: The Role of the Educational Setting in Preventing Burnout," Family Community Health, 6 (Feb 1984):68-75.

⁹Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, pp 91,92.

¹⁰W. D. Gentry, S. B. Foster, and S. Froehling, "Psychologic Response to Situational Stress in Intensive and Non Intensive Nursing," Heart and Lung, 1 (1972):793-796.

¹¹C. Maslach and A. Pines, Experiencing Social Psychology, New York, NY: Random House, 1979, pp 246-252.

¹²M. Olson, "OR Nurses Perception of Stress," AORN, 25 (1977):43-47.

¹³Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, p 151.

¹⁴Joseph F. Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, PhD Dissertation for the Graduate College of the University of Iowa, 1983.

¹⁵J. S. House, Work Stress and Social Support, Reading, Massachusetts: Addison-Wesley, 1981.

CHAPTER III

CONCLUSIONS/RECOMMENDATIONSIntroduction

The results of this study indicate that there is a "low to moderate" degree of burnout among nurses at Womack Army Community Hospital. Even though comparisons with Maslach's and Constable's studies, revealed lower scores for WACH nurses, burnout is still a phenomena that needs to be dealt with. Sources of Social Support were shown in this study to be good predictors of burnout among nurses in the hospital. Supervisor Support and Coworker Support both were shown to be statistically significant when the burnout dimensions were regressed on these social support variables. How the nurses felt about their supervisor and the people they work with on a day-to-day basis appear found to be very important ways of lowering the adverse effects of burnout. Finally, the demographic/job related variables of age, areas of work, and the number of hours of direct patient contact were also found to be statistically significant in terms of predicting the extent of burnout and social support among the nurses in this study. By focusing on these variables (i.e. supervisor support, coworker support, age, areas of work and hours of direct patient care), an excellent foundation could be layed for generating both nursing management programs, and hospital organizational remedies for the prevention and/or amelioration of burnout among nurses at Womack Army Community hospital. As Christine Maslach has stated "The key to prevention is early action. The risk of

burnout is less likely to become a reality if you get a head start on it."¹ With this in mind, the remainder of this chapter will focus on recommendations that Department of Nursing at WACH may concentrate on when performing strategic planning for the future. In the initial section titled "Nursing Education/Training," the factor of age and how the nursing profession should concentrate their efforts for the prevention of burnout among the younger nurses will be explored. In the next section titled "Individual Strategies," ideas pertaining to improving the nurses physical/psychological well-being are introduced. Improvements in the nursing areas of work and dealing with the hours of direct patient care that nurses are involved with are both incorporated into the "Nursing management organization strategies" section. Here, the construction of a hospital wide comprehensive anti-burnout program are discussed in detail, and methods of implementation are analyzed. In the section titled "Improving Social Support Dimensions," the primary focus revolves around building better supervisory support and coworker support mechanisms. Finally, in the "Research" section, several recommendations are made to the Department of Nursing in terms of continuing research in the area of burnout prevention/amelioration.

Nursing Education/Training

As revealed in this study and supported by previous research, the younger the nurse, the more susceptible he/she is

to becoming burned out.^{2,3} Therefore, common sense would indicate that this is the group of nurses which management should concentrate on when dealing with the burnout problem. Review of the literature revealed overwhelming agreement on this, however, many authors felt that we shouldn't wait until the nurse actually starts his/her first job to deal with the issue of burnout. Rather, nursing schools are the places where this topic should be thoroughly addressed. As Storlie has stated:

"Burnout requires a susceptible host--that host being the highly idealistic nurse. For many, it begins in nursing school. The student is surrounded, nurtured, and protected by teachers, many of whom have had little recent contact with hospitals or direct care of the sick. The ideals the student learns often are unrelated to the real world of health care. When the student is graduated, she reads ads that invite her to work at 'the hospital that really cares' or one where 'the patient is our concern.' The young nurse believes that caring matters, that loving and respecting others is what nursing is all about. She hopes to help people to heal or cure...But often she finds in the hospital 'What I was taught' and 'What I want to believe' clash with what really is."⁴ This phenomenon has been referred to as "Reality Shock,"⁵ and is something which this student feels could be improved with more realistic training and education in our nursing schools today. It is imperative that nursing students not only receive the necessary rudiments of nursing care in terms of didactic training, but they should also receive a thorough indoctrination to the "real" world, and the true "state" that hospitals and other health care institutions are in.

John-Henry Pfifferling suggests that the following innovations be implemented into nursing curriculums. First, students should be exposed to the whole of the profession before they are introduced to the different parts. Examples of this might be for a nursing student to act as a patient advocate in a hospital where they would be immersed in all aspects of the hospital environment and not just the nursing department. He also feels that the students should be exposed to the mistakes that their faculty members make in problem solving behavior so that the young nurse is reinforced with the fact that neither instructors nor supervisors nor anyone is above making errors in judgement. Thus he/she can be on guard against medical arrogance which could ultimately cost a patient his/her life. This will help the student avoid becoming too arrogant, thus improve provider-patient bonding mechanisms and reduce the probability that the nurses, when confronted with mistakes/problems, will distance himself/herself from the patients which is a sign that burnout is approaching. Another innovation Pfifferling recommends would be for students to be exposed to "recovered" health care professionals who at some time in the past have suffered from the stress syndromes that hassle nurses, including burnout, impairment, and job frustration. By exposing the nurses to these types of individuals, they can learn both negative and positive coping mechanisms, and actually "feel" the human cost of their future profession. Finally, and probably most importantly, the faculty should add community practitioners to the nursing curriculum and allow the students to learn behavioral patterns

which have been shown to be successful in dealing with the nursing environment.⁶

The bottom line here is to better prepare these nurses for "reality," and though ideals are important, they should not be "overemphasized." The key to success in regards to education, as experienced by this student, is increased information. Maslach states "My own position is that the more prior information there is about burnout, the better. People should have more accurate expectations about the work they are getting into before they actually start on the job. If they did, there would be fewer unpleasant 'surprises' or 'reality shocks' that shatter their ideals or lead them to consider themselves as total failures."⁷

One may ask at this point what all of this discussion has been leading to, and how can the Department of Nursing at Womack affect a nurses training prior to their entry onto active duty. Actually, this student's recommendation is already being accomplished on several fronts where young nurses are being prepared for their future profession. The Army's Nursing ROTC program throughout the United States requires that nursing students spend many weeks working in military hospitals during their summer breaks. This is an ideal opportunity for the nursing management at Womack to implement a program introducing these nursing students to Army life in general, and to the work environment here at the hospital. The topics of stress and burnout could also be introduced or reinforced sometime during these training periods. The other program which is just now being organized/implemented is an affiliation with a local

nursing school. This will include regularly scheduled rotations by the civilian nurses to the various areas of WACH, and will also allow many of the Womack nursing staff to hone their skills in teaching at the local school. Once again, this is definitely a step in the right direction in both addressing the phenomena of burnout by educating these young students, and by giving our nursing staff some external benefits in improving their own professional lives. Finally, it is recommended that all nurses everywhere lobby their professional nursing organizations to address this issue of burnout and not allow it to be dismissed as just a sociological buzzword. If enough nurses emphasize the need for increased awareness of this problem in both nursing schools and health care institutions alike, burnout might very well be made less of a significant deterrent to proper patient care than it is today.

Individual Strategies

The results of this study were very much dependent on the responses that each individual nurse submitted during the surveys. As Barbara Yee states, "Stress, is a very personal experience and to manage it effectively, one must deal with the self and the environment. Many changes can be made to reduce stress and the possibility of developing burnout."⁸ Throughout the literature there are countless listings of individual strategies that nurses and other health care professionals can focus upon in attempting to prevent and/or deal with burnout. Presented here are but a few of the recommended areas which may

make a positive impact in the prevention of burnout if the nurses devoted their attention to these ideas.

The first area of concentration could be that of taking better care of one's body. "Burnout often leads to a deterioration of physical well being. The professional becomes exhausted, is frequently sick, and may be beset by insomnia, ulcers, and migraine headaches, as well as more serious illnesses."⁹ It has been recommended that continuing or initiating a structured physical exercise program is an excellent way to ward off stress and burnout. Jogging, aerobic dancing, ballet, bicycle riding, playing racquetball, tennis, golf, or even strenuous housework such as cleaning the kitchen, bathroom, or beating a rug for those nurses who are not inclined to sports, are just several ideas which could improve one's health and well being.^{10,11} Proper nutrition and diet is another area which is often ignored. By reducing one's intake of alcohol, nicotine, and caffeine; and by maintaining well balanced meals combined with a structured exercised program as described above, nurses should feel increased energy levels and physical well being. This could, in turn, help to reduce effects of stress leading to burnout.

It has also been shown that people who deal with burnout most effectively are those who practice a "decompression routine." This is, essentially, some sort of activity that one can do somewhere after you leave work and before you arrive home. This could again be done in the form of physical exercise, but many people tend to do less strenuous activities such as sitting

in a park, strolling around a lake, sitting in a sauna/steam bath, etc. The purpose of this routine is to increase relaxation, ease the pressures of the day, and help the nursing professional to put the activities of that particular work day in perspective with his/her life. Many authors have recommended this as an effective tool when dealing with stress/burnout, and is an activity worthy of special attention.^{12,13,14}

Other areas of consideration for the nurses at Womack Army Community Hospital include improving effective time management, establishing external hobbies/recreation activities, practicing "time-outs" which are intervals during the workday when nurses get away from the ward, clinic, office, etc., for a few minutes of stress reduction, learning relaxation skills such as yoga, meditation, biofeedback or autogenic training (using mental images to effect changes in the body), and very importantly scheduling leaves/TDYS at intervals which will help to ameliorate the stress and/or burnout on the job.

Research has shown, as stated above, that a proper diet, exercise, relaxation, meditation, outside of work activities, etc., are effective measures to take in preventing burnout. By improving on these areas, nurses should be more able to concentrate on what they do best which is to provide the best quality and concerned care to their patients.

Nursing Management/Organization Strategies

A common theme that runs throughout the literature is that "although individual coping techniques may be quicker and easier,

improvements in the work place may have a more pervasive and long lasting impact on rates of burnout. Second, organizational changes acknowledge the significance of the situation in burnout. Third, an organizational response to burnout constitutes recognition of it as a legitimate problem."¹⁵

The Nursing management team and all nursing supervisors can consider themselves to be the organization in this endeavor, since for the most part, the Nursing Department has been given responsibility for controlling its own resources (manpower, money, material, and time). With this in mind, it is strongly recommended that the organization be both proactive and reactive to burnout in supportive and strategic ways. An excellent manner by which to accomplish this would be to construct a comprehensive anti-burnout program at Womack. One example of a program which could be implemented is Kramer's "Anticipatory Socialization Program." This program was designed to decrease the magnitude of reality shock and its consequences, and would be particularly valuable to the new and/or younger nurses at Womack. The program is broken down into four phases. Phase one concentrates on producing some mild reality shock that the nurses might encounter on their jobs. Phase two exposes the employees to the negative aspects of the policies and practices that both the Nursing Department and the hospital organization work under, and open discussion is solicited for possible solutions for improving these work situations. Phase three concentrates on teaching the nurses what others expect of them. This could be done by having a panel of head nurses, supervisors, or administrators speak on

this subject. Another aspect of this phase would be to have other nursing staff members, who may also be new to the organization relate some initial reactions and responses to their new job. The final phase of the program, Phase four, attempts to teach the nurses the theories and techniques of conflict resolution and negotiation. These skills would hopefully give the novice nurse assistance in the future when he/she is confronted with conflict/stress/burnout.¹⁶ This would be an excellent program and could be part of new nurses orientation into the hospital. But what about the nurses who have been with the organization for a longer length of time? This is where the nursing management, including supervisors and head nurses, need to become actively involved. Nursing management must insure that its leadership understands the scope and seriousness of the problem of burnout. This could be accomplished by inviting a noteworthy professional who has conducted research in this area to address the limited groups of nursing administration, supervisors, and head nurses. Most probably, many of the areas addressed in this study will be reinforced thereby establishing a solid base whereby the nurses could go back to their wards/clinics/offices and have deeper appreciation/understanding of the issue of burnout. These nurses, in turn, could implement their own steps in ameliorating burnout such as providing relief periods, "time outs", for all of their nurses on every shift; encouraging their nurses to take longer vacations when feasible; requiring their subordinate supervisors to be more supportive of the staff when discussing their personal problems, and

recognizing the staff's needs, goals and desires; organizing peer support groups; rotating assignments, especially in the areas which have more exposure to direct patient care. By offering continuing education programs, especially in-service training which could include small "burnout workshops; reinforcing the "decompression routines" (discussed earlier) and by providing every opportunity for nurses in his/her work environment to maintain the individual programs such as exercise, meditation, stress management techniques that were also considered to be important in dealing with burnout/stress.¹⁷ There are countless other measures which could be taken, but it is quite evident that the nursing leadership/organization from top to bottom may well be the link in determining whether any program or effort dealing with burnout will be a success or failure. As Paine stated, "The challenge of providing creative supervision includes helping the novice staff member develop investments in work responsibilities, enhancing the competence of advancing staff, and encouraging experienced staff to develop their own styles of supervision and consultation. Creative supervision does not originate with the supervisor alone, just as burnout does not originate with the individual staff member. The interface between the organization and the individual is where scrutiny must be applied in detecting conditions that favor or thwart burnout."¹⁸

Improving Social Support Dimensions

As has been shown in this study and verified by other researchers (Maslach, Caplan et.al, House, Cherniss, Constable,

etc.), Social Support, especially from one's supervisor or coworker, is very much involved in the burnout phenomena. As stated by Cherniss, "the availability of social support is a critical feature of any individual's social environment and a potentially effective lever for making social environments less stressful, more healthful, or more conducive to effective adaptation to stress."¹⁹ Although this may be interesting information to know, what exactly does it mean to the nurses at Womack Army Community Hospital? As far as the nursing supervisors/administrators are concerned, there needs to be greater emphasis placed on building their relationship with subordinate nurses with respect to improving these nurse's perceptions of both their work environment and life in general. Supervisors are in an excellent position to develop formalized social support systems with their staff. Especially in the Outpatient Clinic areas and the Intensive Care Units, which appear to be areas of lower supervisor support, supervisors/administrators could concentrate on improving their technical assistance, accessibility to their subordinates, communication skills (both horizontally and vertically), information receiving/dissemination skills, feedback mechanisms, listening skills, and their role as nursing "models."

With all of these improvements in hand, one of the most highly regarded mechanisms for making supervisor support better is through the use of effective staff meetings. "Staff meetings can be effective organizational buffers against burnout and tedium if they fulfill several functions. They should provide the staff

with opportunities to express themselves, and to influence the institution's policies. This would allow staff to exert some control over their work and would give them a greater sense of commitment to the institution."²⁰ Nursing staff meetings on a small scale (ward/clinic level) have not been observed to be a frequent occurrence at WACH, and even though the proverbial "We're too busy taking care of patients" phrase has been heard on numerous occasions, this is one area which could produce favorable results in preventing and/or dealing with burnout.

Coworker support is another dimension which was reported to be an excellent predictor of burnout at Womack. Therefore, it would behoove the prudent manager to concentrate on improving relationships between all of the nurses in their organization. Maslach, in her research, revealed that burnout rates are lower for these professionals who actively express, analyze, and share their personal feelings with their colleagues. Not only do they consciously get things off their chest, but they have an opportunity to receive constructive feedback from other people and to develop new perspectives and understanding with their patients/clients."²¹ Again, the literature recommends such devices as peer support groups, luncheons, coffee breaks, night social functions, and burnout workshops as forums for individual staff members to better relate with those that they work with. Whatever the format, the social and emotional support as provided by one's peers can be critical for survival on the job. With the constant nursing turnover, the diversity of work environments and the vast physical separation of nurses throughout the hospital,

the nursing leadership has a formidable task in attempting to build a cohesive work group. However, when combating such an "insidious" opponent as job stress leading to burnout, the effort is well worth the cost in terms of improving the health of the organization and those who work within it.

Future Research

Research in the area of burnout is still in its infancy. More research into this vast phenomena needs to be performed. Burnout is an extremely important and serious problem to both hospital and nurse administration. This student challenges the entire staff at WACH to attack this problem with a vengeance, especially the nursing management who can plan and implement strategic changes aimed at preventing or decreasing the adverse effects of burnout. Burnout can be prevented and/or ameliorated, but it must be a team effort made up of dedicated individuals with vision for the future. Leadership within the organization must provide the initiative, the commitment, and the needed resources. There is no doubt in this student's mind that the Commander and staff at Womack are dedicated to improving social support and decreasing burnout among nurses and all other members of the WACH staff.

FOOTNOTES

¹Christina Maslach, Burnout - The Cost of Caring, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1982, p 131.

²Ibid, pp 59-60.

³Joseph F. Constable, The Effects of Social Support and the Work Environment Upon Burnout Among Nurses, PhD Dissertation for the Graduate College of the University of Iowa, 1983, pp 91, 93.

⁴F. J. Storlie, "Burnout: The Elaboration of a Concept." American Journal of Nursing, 79 (1979) pp 2108-2109.

⁵M. Kramer, Reality Shock Why Nurses Leave Nursing, St. Louis, Missouri: C. V. Mosby Co., 1974.

⁶John-Henry Pfifferling, "Viewpoint: The Role of the Educational Setting in Preventing Burnout," Family Community Health, 6 (Feb 1984), pp 73-75.

⁷Maslach, Burnout - The Cost of Caring, p 135.

⁸Barbara H. Yee, "The Dynamics and Management of Burnout," Nursing Management, 12 (November 1981), pp 14-16.

⁹Christina Maslach, "Burned-Out," The Journal of Canadian Psychiatric Nursing, 20 (1979), p 7.

¹⁰Thomas W. Muldary, Burnout and Health Professionals, Norwalk, Connecticut: Appleton-Century-Crofts, 1983, pp 135-136.

¹¹Ruth D. Knowles, "Handling Depression Through Activity." American Journal of Nursing, (June 1981) p 1167.

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¹³Frances B. Wimbush, "Nurse Burnout: Its Effect on Patient Care," Nursing Management 14 (Jan 1983), p 55.

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APPENDIX A
SURVEY INSTRUMENT



DEPARTMENT OF THE ARMY
U.S. ARMY MEDICAL DEPARTMENT ACTIVITY
FORT BRAGG, NORTH CAROLINA 28307-5000

REPLY TO
ATTENTION OF

Dear

I would like to secure your participation in a survey at Womack Army Community Hospital (WACH) which will form the basis of my Master's Graduate Research Project for the US Army/Baylor University Graduate Program in Health Care Administration.

Enclosed is a three part questionnaire which should take approximately twenty minutes of your time to complete. The questionnaire deals mainly with your perceptions of the work environment at Womack as well as aspects of your relationships with coworkers, supervisors, spouses, family, and/or friends. I would very much appreciate your close attention and response to each of the questions within each section of the questionnaire since the different sections are closely related to one another.

I wish to assure you that your responses will be held in the strictest confidence. There will be a numbered coding system utilized to ensure that I receive the maximum number of questionnaires back; however, you are not required to sign the questionnaire and once the questionnaires are turned in, the master roster will be destroyed, thereby ensuring your anonymity.

Time is of the essence for me in this Master's Program, so I ask your indulgence in completing the questionnaire as quickly as feasible. Once the questionnaires have been completed, I would ask that you return them to me during normal duty hours in my office (Deputy Commander for Administration) or place them in the drop boxes provided on Wards, 2B, 3A, 6A, 7B, 8A, and the Internal Medicine Clinic.

Your input should provide us with valuable information about various aspects of the hospital work environment and will hopefully lead to ways and means of improving working conditions and ultimately patient care.

Thank you for your cooperation and assistance.

Sincerely,

- Encls
1. Instructions
2. Questionnaires

JOHN A. VOETSCH
Administrative Resident

INSTRUCTIONS

1. Please answer all questions on the attached questionnaire.
2. Most questions can be answered simply by checking (✓) one of the answers or by circling the appropriate response (a few questions are short fill-ins). If you do not find the exact answer you wish to give, please check the one closest to it.
3. A space has been provided at the end of the questionnaire where you can add explanations, general comments, or comments pertaining to specific questions.
4. Please return your completed questionnaire to me in my office (Deputy Commander for Administration's Office in Hospital Headquarters) or by dropping it in one of the drop boxes on Wards 2A, 3A, 6A, 7B, 8A, or the Internal Medicine Clinic.
5. If you have any questions about this study and/or the questionnaire, feel free to call me at 6-2906 or 6-6714.

PART I
GENERAL INFORMATION

1. What is your age?
 - ☐ Less than 25 years
 - ☐ 25 to 29
 - ☐ 30 to 34
 - ☐ 35 to 39
 - ☐ 40 to 44
 - ☐ 45 to 49
 - ☐ 50 to 59
 - ☐ 60 years or older
2. Your sex:
 - ☐ Male
 - ☐ Female
3. What is your employment status?
 - ☐ Military
 - ☐ Civilian
4. How long have you worked in your career field?
 - ☐ Less than 2 years
 - ☐ 2 to 5 years
 - ☐ 6 to 10 years
 - ☐ 11 to 15 years
 - ☐ Over 15 years
5. How long have you worked here?
 - ☐ Less than 2 years
 - ☐ 2 to 5 years
 - ☐ 6 to 10 years
 - ☐ 11 to 15 years
 - ☐ Over 15 years
6. Are you considered:
 - ☐ Part-time
 - ☐ Full-time
7. How many hours per week do you work on the average?
 - ☐ Less than 10
 - ☐ 10 to 20
 - ☐ 21 to 30
 - ☐ 31 to 40
 - ☐ Over 40
8. On what shift do you usually work?
 - ☐ Day
 - ☐ Evening
 - ☐ Night
 - ☐ Rotating
9. How much nursing education have you completed?
 - ☐ LPN
 - ☐ Associate Degree
 - ☐ Diploma
 - ☐ Baccalaureate
 - ☐ Graduate Degree
10. What is your marital status?
 - ☐ Married
 - ☐ Single
 - ☐ Widowed
 - ☐ Divorced or separated
11. Do you have children?
 - ☐ Yes
 - ☐ No
12. Preschool Children:
 - a. Do you have preschool children?
 - ☐ Yes
 - ☐ No
 - ☐ Not applicable
 - b. If yes, please state number of preschool children: _____

13. Please describe your present working position:

a. Title and/or general position designation (e.g., head nurse, section chief, supervisor, administrator, or staff member) _____

b. Area of work:

- ☐ Office of the Chief Nurse
- ☐ Nursing Education and Training
- ☐ Medical Ward
- ☐ Medical Intensive Care Unit
- ☐ Coronary Care Unit
- ☐ Psychiatric Ward
- ☐ Surgical Ward
- ☐ Surgical Intensive Care Unit
- ☐ Orthopedics Ward
- ☐ Pediatric Ward
- ☐ Labor and Delivery
- ☐ Newborn Nursery
- ☐ Obstetrics and Gynecology Ward
- ☐ Emergency Room
- ☐ Anesthesia
- ☐ Operating Room
- ☐ Outpatient Clinics (all clinics)
- ☐ OB GYN Nurse Course
- ☐ 91C School
- ☐ Other _____

Designate

14. How many employees report directly to you? _____

15. How many employees are under your general supervision? _____

16. How many hours per day, on the average, do you work directly with patients? _____

PART II

On the following pages are several statements of job-related feelings you might have. Please read each statement carefully and decide if you ever feel this way about your present job. If you have never had this feeling, check the box marked "NEVER" and go on to the next statement. However, if you have experienced this feeling, indicate HOW OFTEN you feel it by circling the appropriate number on the 6-point scale. Then, decide HOW STRONG the feeling is when you experience it by circling the appropriate number on the 7-point scale. An example is shown below.

Frequency of Feeling: HOW OFTEN

	1	2	3	4	5	6
NEVER	A FEW TIMES A YEAR	ONCE A MONTH OR LESS	A FEW TIMES A MONTH	ONCE A WEEK	A FEW TIMES A WEEK	EVERY DAY

Intensity of Feelings: HOW STRONG

1	2	3	4	5	6	7
VERY MILD BARELY NOTICEABLE			MODERATE			MAJOR VERY STRONG

Example:

00. I feel depressed at work.

() Never HOW OFTEN: 1 2 3 4 5 6

 HOW STRONG: 1 2 3 4 5 6 7

If you occasionally feel depressed at work (say a few times a month) you would circle the number 3. If, when you do feel depressed, it is a fairly strong feeling, but not as strong as you can imagine, you would circle a 6.

HOW OFTEN:	1	2	3	4	5	6
	A Few	Monthly	A Few	Weekly	A Few	Daily
	Times		Times		Times	
	A Year		A Month		A Week	

HOW STRONG:	1	2	3	4	5	6	7
	Very			Moderate			Very
	Mild						Strong

1. I feel emotionally drained from my work.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

2. I feel used up at the end of the workday.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

3. I feel fatigued when I get up in the morning and have to face another day on the job.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

4. Working with people all day is really a strain for me.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

5. I feel burned out from my work.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

6. I feel frustrated by my job.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()								
	HOW STRONG:	1	2	3	4	5	6	7

HOW OFTEN:	1	2	3	4	5	6
	A Few	Monthly	A Few	Weekly	A Few	Daily
	Times		Times		Times	
	A Year		A Month		A Week	

HOW STRONG:	1	2	3	4	5	6	7
	Very			Moderate			Very
	Mild						Strong

7. I feel I am working too hard on my job.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

8. Working with people directly puts too much pressure on me.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

9. I feel like I am at the end of my rope.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

10. I can easily understand how my patients feel about things.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

11. I deal very effectively with problems of my patients.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

12. I feel I'm positively influencing other people's lives through my work.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

HOW OFTEN:	1	2	3	4	5	6
	A Few	Monthly	A Few	Weekly	A Few	Daily
	Times		Times		Times	
	A Year		A Month		A Week	

HOW STRONG:	1	2	3	4	5	6	7
	Very			Moderate			Very
	Mild						Strong

13. I feel very energetic.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

14. I can easily create a relaxed atmosphere with my patients.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

15. I feel exhilarated after working closely with my patients.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

16. I have accomplished many worthwhile things in my job.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

17. In my work, I deal with emotional problems very calmly.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

18. I feel I treat some patients as if they were impersonal objects.

NEVER	HOW OFTEN:	1	2	3	4	5	6	
()	HOW STRONG:	1	2	3	4	5	6	7

HOW OFTEN:	1	2	3	4	5	6
	A Few	Monthly	A Few	Weekly	A Few	Daily
	Times		Times		Times	
	A Year		A Month		A Week	

HOW STRONG:	1	2	3	4	5	6	7
	Very			Moderate			Very
	Mild						Strong

19. I've become more callous toward people since I took this job.

NEVER ()	HOW OFTEN:	1	2	3	4	5	6	
	HOW STRONG:	1	2	3	4	5	6	7

20. I worry that this job is hardening me emotionally.

NEVER ()	HOW OFTEN:	1	2	3	4	5	6	
	HOW STRONG:	1	2	3	4	5	6	7

21. I don't really care what happens to some patients.

NEVER ()	HOW OFTEN:	1	2	3	4	5	6	
	HOW STRONG:	1	2	3	4	5	6	7

22. I feel patients blame me for some of their problems.

NEVER ()	HOW OFTEN:	1	2	3	4	5	6	
	HOW STRONG:	1	2	3	4	5	6	7

PART III

This part of the questionnaire again deals with your present job and life situation. People around us (both on and off the job) sometimes are very supportive and helpful and sometimes hinder or offer little or no support in our work. This section asks how people around you affect you in such matters. Please circle the response to each question as to how true the statement is concerning the person or persons indicated. If you are not married, please circle NOT MARRIED for questions 1C, 2C and 3C.

1. How much can each of these people be relied on when things get tough at work?

	Not at All	A Little	Some- what	Very much	
a. Your immediate supervisor (boss)	0	1	2	3	
b. Other people at work	0	1	2	3	
c. Your spouse	0	1	2	3	Not Married
d. Your firends and/or relatives	0	1	2	3	

2. How much is each of the following people willing to listen to your work-related problems?

a. Your immediate supervisor (boss)	0	1	2	3	
b. Other people at work	0	1	2	3	
c. Your spouse	0	1	2	3	Not Married
d. Your friends and/or relatives	1	1	2	3	

3. How much is each of the following people helpful to you in getting your job done?

	Not at All	A Little	Some- what	Very much	
a. Your immediate supervisor (boss)	0	1	2	3	
b. Other people at work	0	1	2	3	
c. Your spouse	0	1	2	3	Not Married
d. Your friends and/or relatives	0	1	2	3	

Please indicate how true each of the following statements is of your immediate supervisor or boss

	Not at- all true	Not too true	Somewhat true	Very true
4. My supervisor is competent in doing his/her job.	0	1	2	3
5. My supervisor is very concerned about the welfare of those under him/her.	0	1	2	3
6. My supervisor goes out of his/her way to praise good work.	0	1	2	3

The space below is for your general comments and/or explanations pertaining to specific questions.

Thank you for your time and cooperation in contributing input to this study.

APPENDIX B

STATISTICAL COMPARISONS BETWEEN MBI,
SOCIAL SUPPORT SCALES, AND
DEMOGRAPHIC/JOB RELATED
VARIABLES

Table 26.
DIFFERENCES BETWEEN MALE AND FEMALE NURSES

<u>Variables</u>	Nurse Groups				
	Male (N=41)		Female (N=141)		
	M	SD	M	SD	SL
<u>MBI</u>					
Emotional Exhaustion	-.008	1.014	.004	1.003	<.94
Depersonalization	-.045	.999	.008	1.005	<.77
Prsnl Accomplishment	-.130	1.185	.040	.945	<.35
<u>Social Support</u>					
Supervisor	-.041	1.015	.008	1.002	<.79
CoWorker	.050	.940	-.019	1.021	<.70
Friends & Relatives	-.258	1.199	.067	.927	<.07
Spouse	.244	.938	-.083	1.012	<.11

Table 27.
DIFFERENCES DUE TO AGE

	NURSE GROUPS						
<u>Variables</u>	29 & Under (N=60)		30-44 (N=80)		45 & Over (N=43)		SL
	M	SD	M	SD	M	SD	
<u>MBI:</u>							
Emotional Exhaustion	.261	1.041	.012	.908	-.424	.989	<.003
Depersonalization	.269	1.058	-.008	.934	-.372	.932	<.006
Prsnl Accomplishment	-.097	.870	.119	.997	-.081	1.166	<.39
<u>Social Support</u>							
Supervisor	-.114	1.076	-.018	.990	.190	.903	<.39
CoWorker	-.078	.919	.045	.996	.021	1.124	<.77
Friends & Relatives	-.132	1.029	.054	1.059	.084	.829	<.47
Spouse	-.054	.985	.075	.975	-.073	1.076	<.74

Table 28.
DIFFERENCES IN NURSING EDUCATION

<u>Variables</u>	Nurse Groups						
	LPN (N=40)		Associates Deg (N=14)		Diploma (N=31)		Bach (
	M	SD	M	SD	M	SD	M
<u>MBI</u>							
Emotional Exhaustion	.032	1.090	-.297	.827	-.245	1.014	.093
Depersonalization	-.145	1.075	-.094	.899	-.136	1.019	.160
Prsnl Accomplishment	.040	1.023	-.261	1.103	-.322	1.188	.168
<u>Social Support</u>							
Supervisor	-.068	1.054	.080	1.067	.162	.857	.063
CoWorker	-.184	1.025	.247	.898	-.022	1.120	.080
Friends/Relatives	-.280	1.174	.206	.750	.046	.791	.016
Spouse	-.020	1.033	.401	.657	.041	1.081	-.159

Table 28.

DIFFERENCES IN NURSING EDUCATION

Nurse Groups

Associates Deg (N=14)	Diploma (N=31)	Bachelors Deg (N=75)	Graduate Deg (N=23)
--------------------------	-------------------	-------------------------	------------------------

SD	M	SD	M	SD	M	SD	M	SD	SL
.090	-.297	.827	-.245	1.014	.093	1.031	.120	.788	<.43
.075	-.094	.899	-.136	1.019	.160	.959	-.021	1.043	<.50
.023	-.261	1.103	-.322	1.188	.168	.845	-.011	1.035	<.187
1.054	.080	1.067	.162	.857	.063	.952	-.366	1.188	<.37
1.025	.247	.898	-.022	1.120	.080	.906	-.092	1.170	<.597
1.174	.206	.750	.046	.791	.016	1.043	.254	.863	<.30
1.033	.401	.657	.041	1.081	-.159	1.027	.144	.923	<.57

Table 29.
DIFFERENCES IN TIME EMPLOYED AT
WACH

	NURSE GROUPS						
<u>Variables</u>	< 2 years (N=78)		2 - 5 years (N=67)		> 6 years (N=38)		SL
	M	SD	M	SD	M	SD	
<u>MBI:</u>							
Emotional Exhaustion	.012	1.044	.070	.953	-.162	1.001	<.54
Depersonalization	.022	.971	-.034	.982	.013	1.108	<.94
Prsnl Accomplishment	.036	.995.	.013	.896	-.098	1.191	<.798
<u>Social Support</u>							
Supervisor	.072	.999	-.038	.962	-.079	1.085	<.70
CoWorker	-.013	.989	-.059	.971	.129	1.086	<.66
Friends/Relatives	-.060	1.069	.163	.936	-.158	.942	<.24
Spouse	-.069	1.005	.181	.882	-.213	1.161	<.21

Table 30.
DIFFERENCES DUE TO
HOURS PER DAY OF DIRECT PATIENT CARE

	NURSE GROUPS						
<u>Variables</u>	0-4 hours (N=49)		5-7 hours (N=37)		8+ hours (N=93)		SL
	M	SD	M	SD	M	SD	
<u>MBI:</u>							
Emotional Exhaustion	-.250	.775	.214	1.083	.044	1.068	<.09
Depersonalization	-.257	.750	.238	.999	.021	1.082	<.08
Prsnl Accomplishment	-.094	1.126	-.217	1.007	.133	.934	<.17
<u>Social Support</u>							
Supervisor	.144	.851	-.199	1.115	.044	1.015	<.28
CoWorker	-.048	.971	-.165	.977	.090	1.036	<.41
Friends & Relatives	.038	1.108	-.175	.990	.068	.956	<.47
Spouse	-.011	1.106	-.348	1.183	.137	.835	<.13

Table 31.
DIFFERENCES DUE TO
AVERAGE WORK HOURS PER WEEK

<u>Variables</u>	Nurse Groups				SL
	31-40 hours (N=45)		Over 40 hours (N=135)		
	M	SD	M	SD	
<u>MBI</u>					
Emotional Exhaustion	-.261	1.001	.071	.978	<.06
Depersonalization	-.136	1.074	.024	.948	<.35
Prsnl Accomplishment	-.234	1.111	.074	.965	<.09
<u>Social Support</u>					
Supervisor	.070	.987	-.017	1.013	<.64
CoWorker	-.079	1.075	.017	.983	<.59
Friend & Relative	.056	.929	-.009	1.032	<.72
Spouse	-.101	.956	.020	1.024	<.56

Table 32.

DIFFERENCES IN
AREAS OF WORK

Variables	Nurse Groups					
	Admin (N=25)		Wards (N=92)		Outpatient (N=26)	
	M	SD	M	SD	M	SD
<u>MBI</u>						
Emotional Exhaustion	-.144	.920	.003	1.025	-.056	
Depersonalization	-.290	.939	.068	.992	.337	
Prsnl Accomplishment	-.223	1.183	-.029	1.017	.127	
<u>Social Support</u>						
Supervisor	.165	.719	.020	.998	-.378	
CoWorker	-.026	1.075	-.152	1.000	.030	
Friends & Relatives	-.211	1.092	-.136	1.827	.243	
Spouse	.365	.778	-.032	.969	-.056	

Table 33.

DIFFERENCES DUE TO SUPERVISORY RESPONSIBILITY

Nurse Groups

<u>Variables</u>	Zero (N=69)		1 to 5 (N=50)		6 or More (N=54)		
	M	SD	M	SD	M	SD	SL
<u>MBI</u>							
Emotional Exhaustion	-.059	.993	.090	1.001	.131	1.031	<.56
Depersonalization	-.096	.928	.089	.916	.156	1.193	<.37
Personal Accomplishment	-.060	1.113	-.149	.790	.215	1.023	<.16
<u>Social Support</u>							
Supervisor	-.156	1.062	-.037	.943	.160	.993	<.24
CoWorker	-.076	.983	.096	.861	.003	1.164	<.66
Friends & Relatives	.074	.907	-.061	.888	-.098	1.219	<.61
Spouse	.041	.962	-.283	1.269	.181	.751	<.14

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